

ALABAMA DEPARTMENT OF TRANSPORTATION
PROCEDURE FOR EVALUATION AND MAINTENANCE OF

LIST II-1

CHEMICAL ADMIXTURES FOR USE IN PORTLAND CEMENT CONCRETE

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| 1. | <u>Material:</u> Chemical admixtures for use in Portland Cement Concrete | 6.5 | Test data from an independent laboratory showing actual test results for all parameters required in the Department's Specifications. The Department requires results for all compressive strength tests performed at 3, 7, 28, 180, and 365 days. |
| 2. | <u>Specification:</u> Sections 808 and 809 of the Alabama Department of Transportation's Specifications | 6.6 | Submittal and testing fees according to Department procedure BMTP-355. |
| 3. | <u>Jurisdiction:</u> Product Evaluation Board (Concrete Section) | 7. | <u>Producer's Maintenance Requirements:</u> Companies with products on this list will be expected to comply with the following to stay on the list: |
| 4. | <u>Job Acceptance Requirements:</u> No Job Control testing required if material performs satisfactorily. Submit samples to the Central Laboratory if the material is suspected of being inferior. | 7.1 | Produce the same quality of material as supplied for the original evaluation. |
| | | 7.2 | Provide only approved materials to Department projects. |
| | | 7.3 | Promptly report to the Department any changes in the company name or the product name, or changes of address or ownership of the company. |
| 5. | <u>Project Engineer's Responsibility:</u> | 7.4 | Notify the Department of any changes in production of the product. Any alteration that will change the product chemically or physically will require a reevaluation of the product. |
| 5.1 | Read and follow sections of Department procedure BMTP-170, "Method of Controlling Concrete Operations for Structures and Portland Cement Concrete Pavement" | | |
| 5.2 | Mixes combining an air entraining agent with a water reducer or retarder admixture, shall be both from the same manufacturer. Producers of types F and G admixtures, who do not manufacture air entraining agents, will be allowed to combine their products with air entraining agents from other manufacturers after a written request to the Concrete Engineer and provided the air entraining agents show compatibility with these products. | 8. | <u>Laboratory Testing:</u> The Department will make selected verification tests of the product to assure compliance with the Department's Specifications. These could include any or all of the following. |
| | | 8.1 | Laboratory concrete design mix complete with compressive strength analysis. |
| | | 8.2 | An infrared spectrograph of the dried solids* |
| | | 8.3 | The solids content of liquid admixtures* |
| | | 8.4 | The specific gravity of liquid admixtures* |
| 6. | <u>Producer's Initial Requirements:</u> Companies wishing to have products evaluated for placement on this list should furnish the Department's Product Evaluation Engineer with the following: | | *Note: The marked items will be checked against the limits as submitted in section 6.3. The Department uses this information to decide when field samples meet the limits set in the specifications. |
| 6.1 | Name and address of the company producing the product. | | |
| 6.2 | Standard material safety data sheets for the product. | 9. | <u>Contractors' Requirements:</u> The prime contractor will be responsible for purchasing and using only approved materials. |
| 6.3 | A certified statement giving the producers quality control limits for the following parameters: specific gravity, solids content, and chloride content. | | |
| 6.4 | A 1 liter sample of each type of material being qualified. | 10. | <u>Removal of Products:</u> Products may be removed from this list for any of the following: |

- 10.1 Mislabeling products or substitution of products other than those originally evaluated.
- 10.2 Failure to comply with any of the Department's requirements for this type of material.
- 10.3 Failure to perform satisfactorily on the job.
- 10.4 A continued pattern of failure of products to be within the quality control limits set in the specifications.

- 11. **Miscellaneous Concrete Admixtures:**
Products in this category do not fall into any of the Types listed in AASHTO M-194, nor AASHTO M-154.
- 11.1 Approval of materials will be based on the following:
 - 11.1.1 Information and samples as required in Section 6 of this procedure shall be submitted by the Producer.
 - 11.1.2 Chemical finger print testing of the product shall be conducted by the Department for future product verification.
 - 11.1.3 Independent laboratory testing shall be supplied at the producers expense. All applicable test necessary to demonstrate products working properties as well as the physical properties of the finished concrete shall be conducted.
 - 11.1.4 Selected verification test may be conducted by the Department to verify test results.
 - 11.1.5 A minimum of 12 months of data from actual field use must be submitted.
- 11.2 Products approved for the miscellaneous category must have approval from the Materials & Test Engineer on a job by job basis prior to use. A written request from the Prime Contractor stating the reasons for using the product shall be submitted prior to approval. Products used on projects will not add additional cost to the State.

- 11. **Correspondence:** All correspondence concerning this list should be directed to the following:
Product Evaluation Board
Alabama Department of Transportation
3704 Fairground Road
Montgomery, AL 36110